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[54] **METHOD AND APPARATUS FOR OPTIMIZING SYSTEM OPERATIONAL PARAMETERS**

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[58] Field of Search 364/402; 379/113, 221; 340/827

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[57] **ABSTRACT**

Method and apparatus for optimizing the operational state of a system employing iterative steps that approximately follow a projective scaling trajectory or an affine scaling trajectory, or curve, in computing from its present state, x_0 to a next state x_1 toward the optimum state. The movement is made in a transformed space where the present (transformed) state of the system is at the center of the space, and the curve approximation is in the form of a power series in the step size. The process thus develops a sequence of tentative states x_1, x_2, x_n .... It halts when a selected suitable stopping criterion is satisfied, and assigns the most recent tentative state as the optimized operating state of the system.

12 Claims, 9 Drawing Sheets